

# Energy Resources of Australia Ltd (ERA)

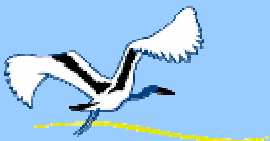


## ERA – Positioned to Meet Demand

**Chris Salisbury**

Chief Executive

May 2008



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## **Acknowledgement**

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**ERA has two adjoining leases on Aboriginal land surrounded by, but separate from, World Heritage Kakadu National Park in the Northern Territory of Australia**

**ERA respectfully acknowledges the Mirarr, Traditional Owners of the land on which the leases (and Ranger Mine) are situated**



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## **Forward Looking Statements**

This presentation contains statements which may include predictions as to the future, and which may constitute forward-looking statements within the meaning of Australian or US securities laws. Such statements include, but are not limited to, statements with regard to capacity, future production and grades, projections for sales growth, estimated revenues and reserves, targets for cost savings, the construction cost of new projects, projected capital expenditures, the timing of new projects, future cash flow and debt levels, the outlook for minerals and metals prices, the outlook for economic recovery and trends in the trading environment and may be (but are not necessarily) identified by the use of phrases such as "will", "expect", "anticipate", "believe" and "envisage".

By their nature, forward-looking statements involve risk and uncertainty because they relate to events and depend on circumstances that will occur in the future and may be outside ERA's control. Actual results and developments may differ materially from those expressed or implied in such statements because of a number of factors, including levels of demand and market prices, the ability to produce and transport products profitably, the impact of foreign currency exchange rates on market prices and operating costs, operational problems, political uncertainty and economic conditions in relevant areas of the world, the actions of competitors, and activities by governmental authorities such as changes in taxation or regulation.

The information in this report relating to Ranger/Jabiluka resources or ore reserves is based on information compiled by John Murphy and James Pocoe, who are members of the Australasian Institute of Mining and Metallurgy. John Murphy and James Pocoe are full-time employees of the company and have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. John Murphy and James Pocoe consent to the inclusion in the presentation of the matters based on their information in the form and context in which it appears.



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## **Outline**

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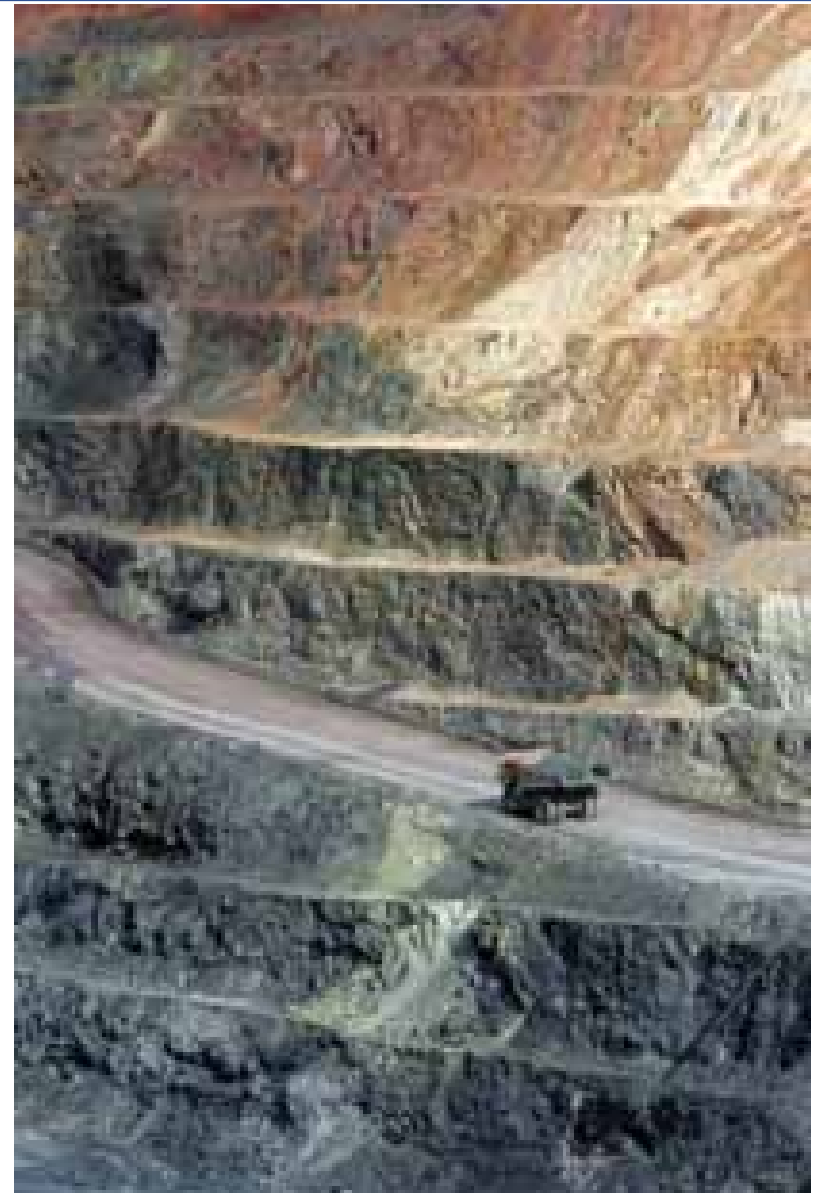
- **Who we are**
- Market
- Financial and operational performance
- Sales contracts
- Expansion and exploration
- Sustainable development
- Summary



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## **Energy Resources of Australia**

- Operations based in the Northern Territory, Australia
- 28 years of uranium mining experience at Ranger mine: world's second largest uranium mine
- World class resources with significant expansion opportunities
- Remote location in a culturally sensitive region – unique operating environment surrounded by the World Heritage Kakadu National park
- 450 employees
- 68.4% owned by Rio Tinto





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# Australian Uranium Deposits

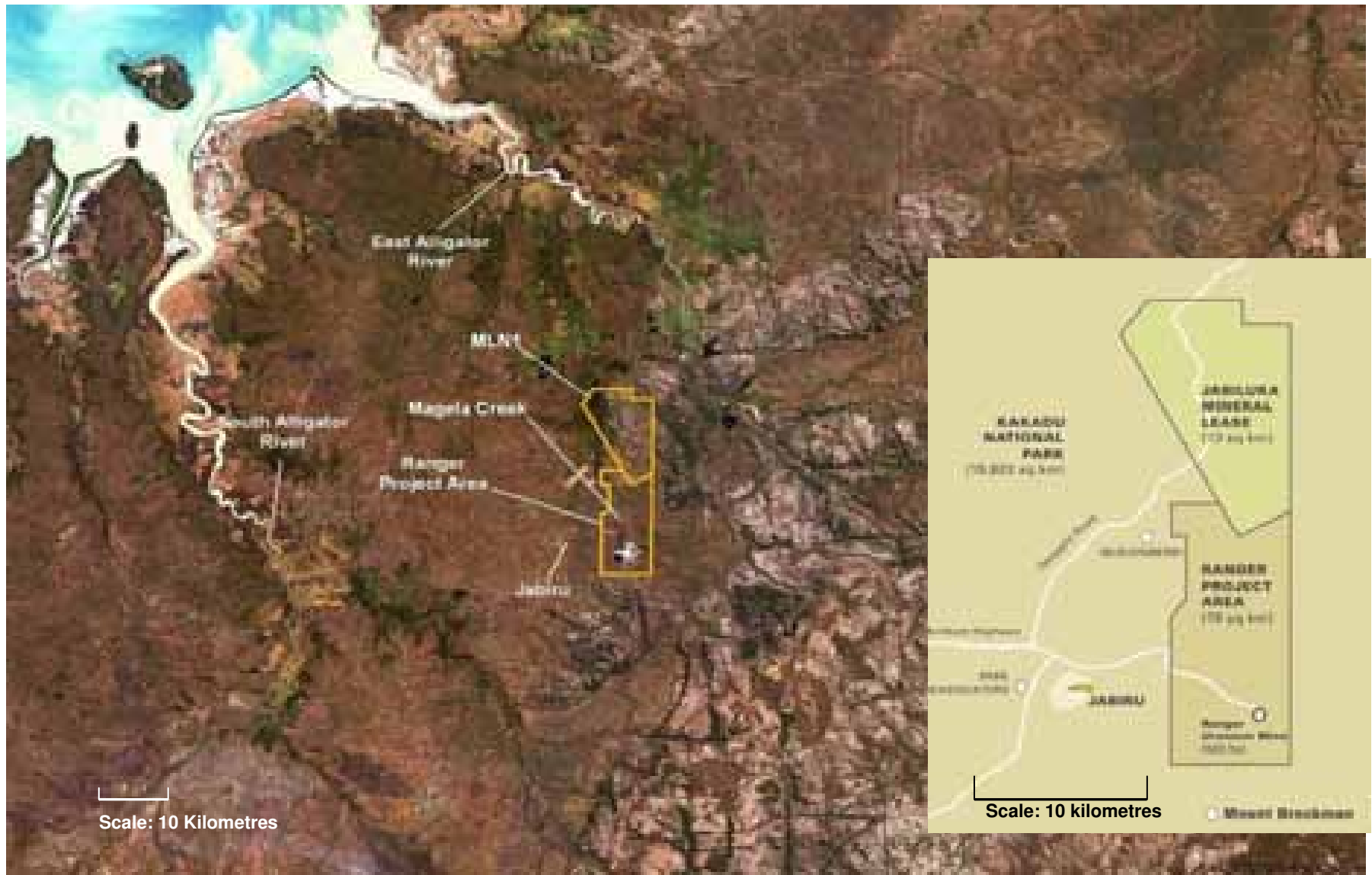


- ) Deposits with 10k to 50k tonne U3O8
- ) Deposits with 50k to 100k tonnes U3O8
- ) Deposits with 100k to million tonnes of U3O8
- ) Deposits with more than 1 million tonnes of U3O8
- Geological regions with up to 1K tonnes of U3O8
- Geological regions with 1k - 10K tonnes of U3O8
- Geological regions with 10k - 50K tonnes of U3O8
- Geological regions with 50k - 1 million tonnes of U3O8
- Geological regions with more than 1 million tonnes of U3O8



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# ERA Leases





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# Ranger Mine Site







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## Outline

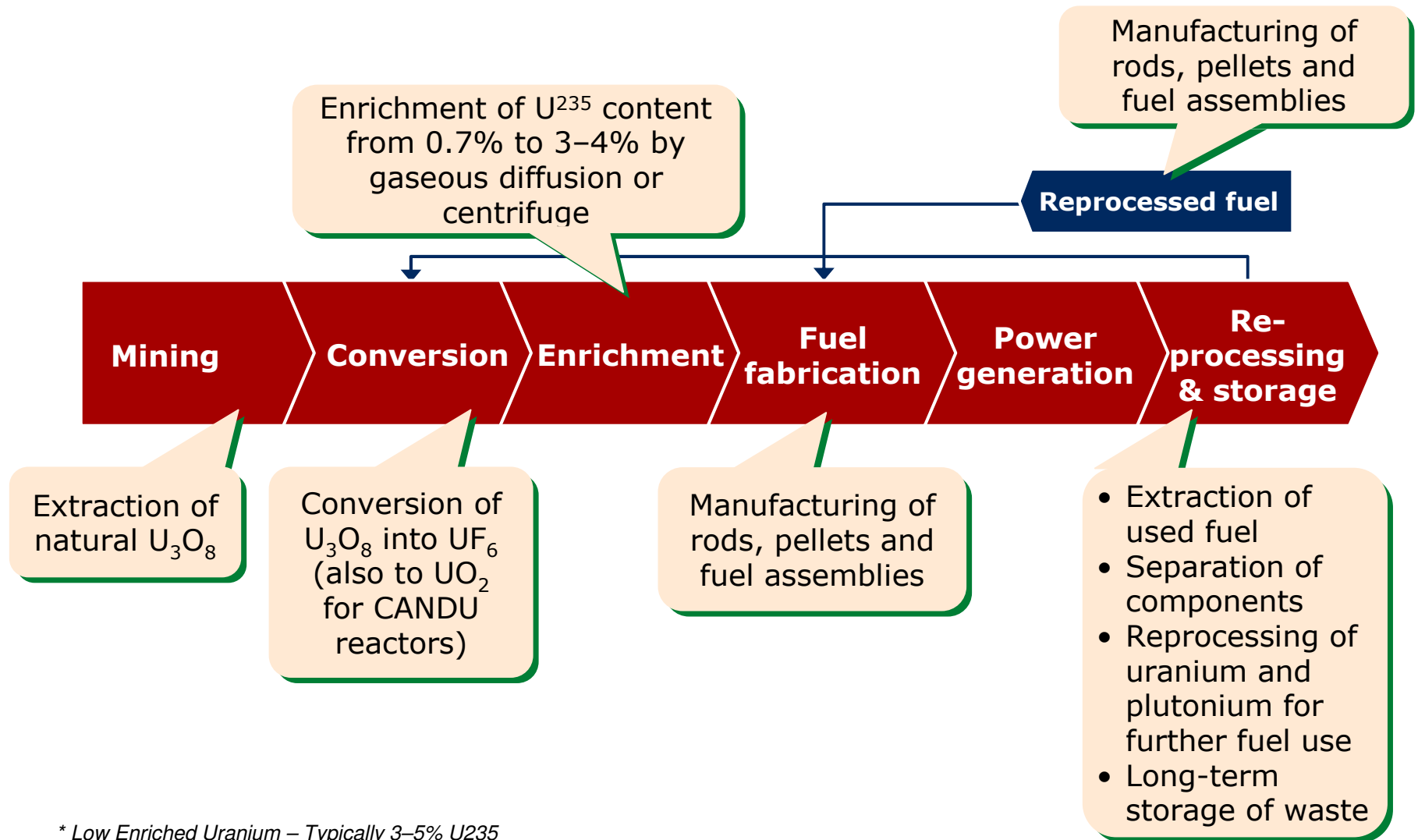
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# Uranium Fuel Cycle



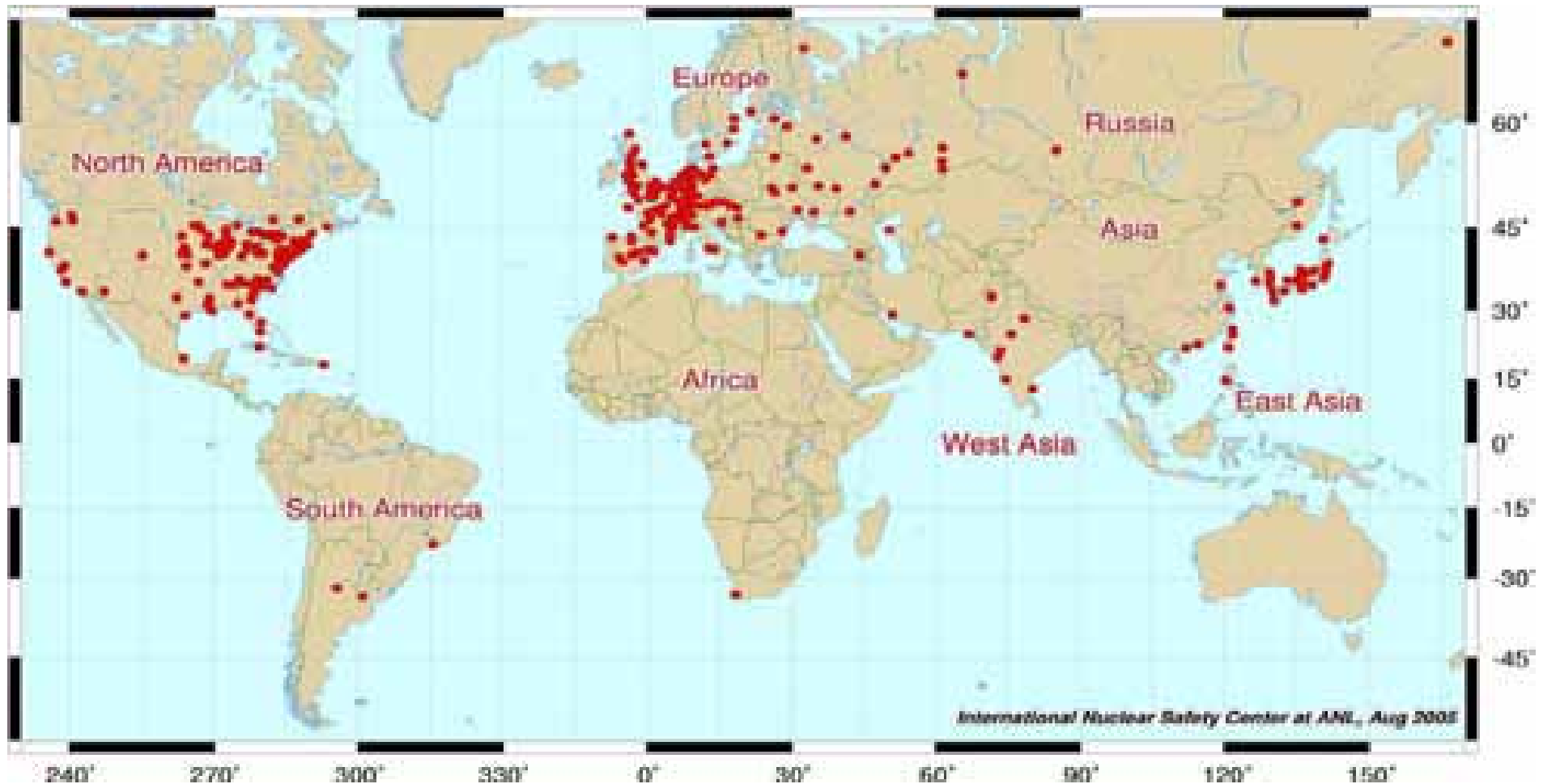
\* Low Enriched Uranium – Typically 3–5%  $U^{235}$

\*\* Highly Enriched Uranium – >20%  $U^{235}$



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## World nuclear power

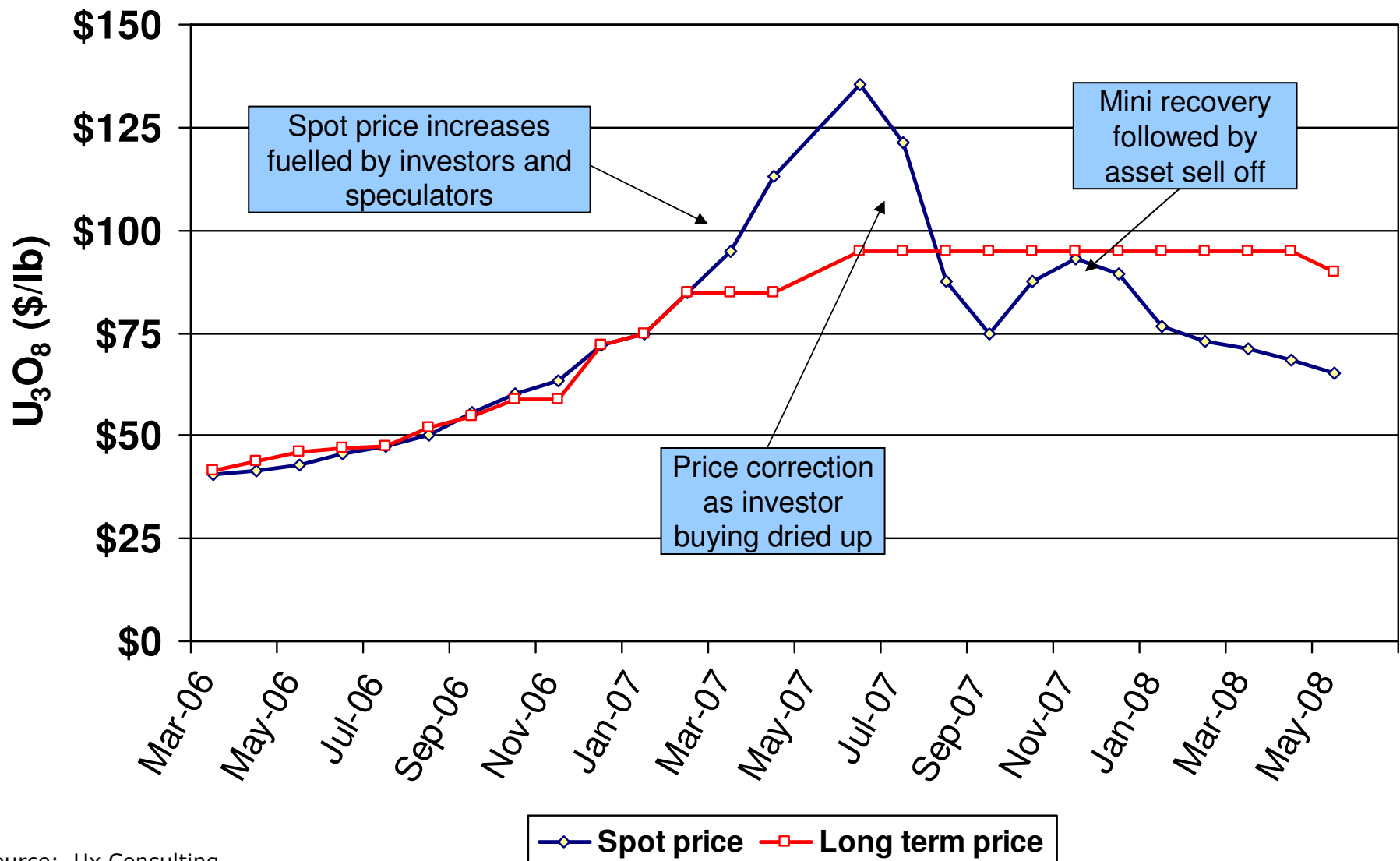


**439 nuclear power reactors world wide,  
generating 16 per cent of world electricity**



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# Uranium long term and spot price variability

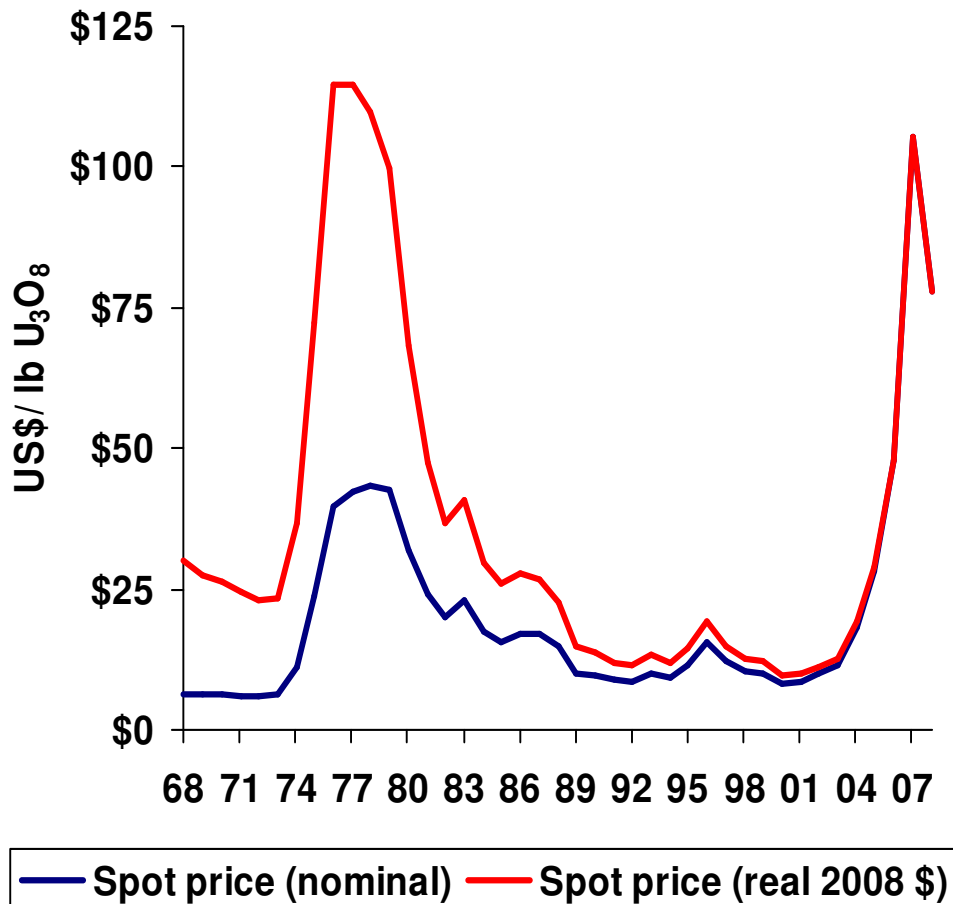


Source: Ux Consulting



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## Uranium spot prices are volatile



### Key market drivers:

- Supply fundamentals unchanged
  - Production problems persist
  - Secondary supply reduced
- Demand increasing
- Divergence with term price has weakened price indicators
- Surplus spot material encouraging discounting
- Term prices are under pressure; term business could 'dry up'

Source: Ux Consulting



<b>WNA Report Date</b>	<b>March 2007</b>		<b>March 2008</b>	
	<b>Total</b>	<b>Capacity (GW)</b>	<b>Total</b>	<b>Capacity (GW)</b>
Currently Operating	435	369	439	372
Under Construction	28	23	35	29
Ordered or planned	66	71	91	99
Proposed	158	124	228	199

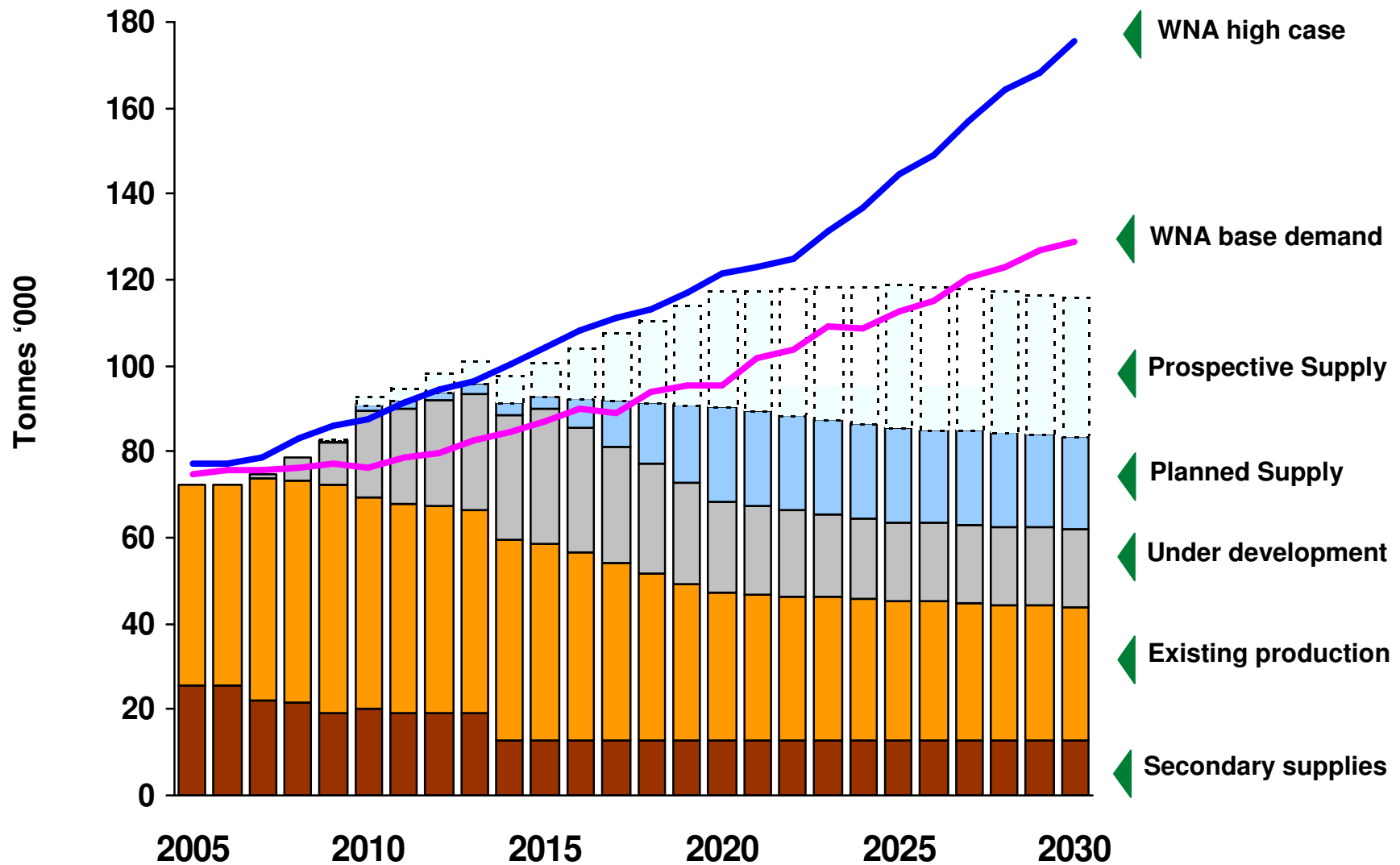
Source: WNA

- Nuclear renaissance is gathering momentum, driving factors:
  - Burgeoning energy requirements to sustain economic growth
  - Climate change concerns
  - Security of energy supply
- China will lead the way, WNA demand estimates are too conservative - China forecasts between 40-60GW by 2020; 140GW+ by 2030 (WNA upper case China – 36GW by 2020)
  - Main obstacle: manufacturing capability
- Significant new build planned in Russia, Asia and India
- In the US, 9 Construction-Operating Licences (COL) applications pending; a further 9 are expected this year
  - 12 new reactors by 2020?
  - First online 2016/17?



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# Uranium Demand Versus Supply



Source: World Nuclear Association (WNA)



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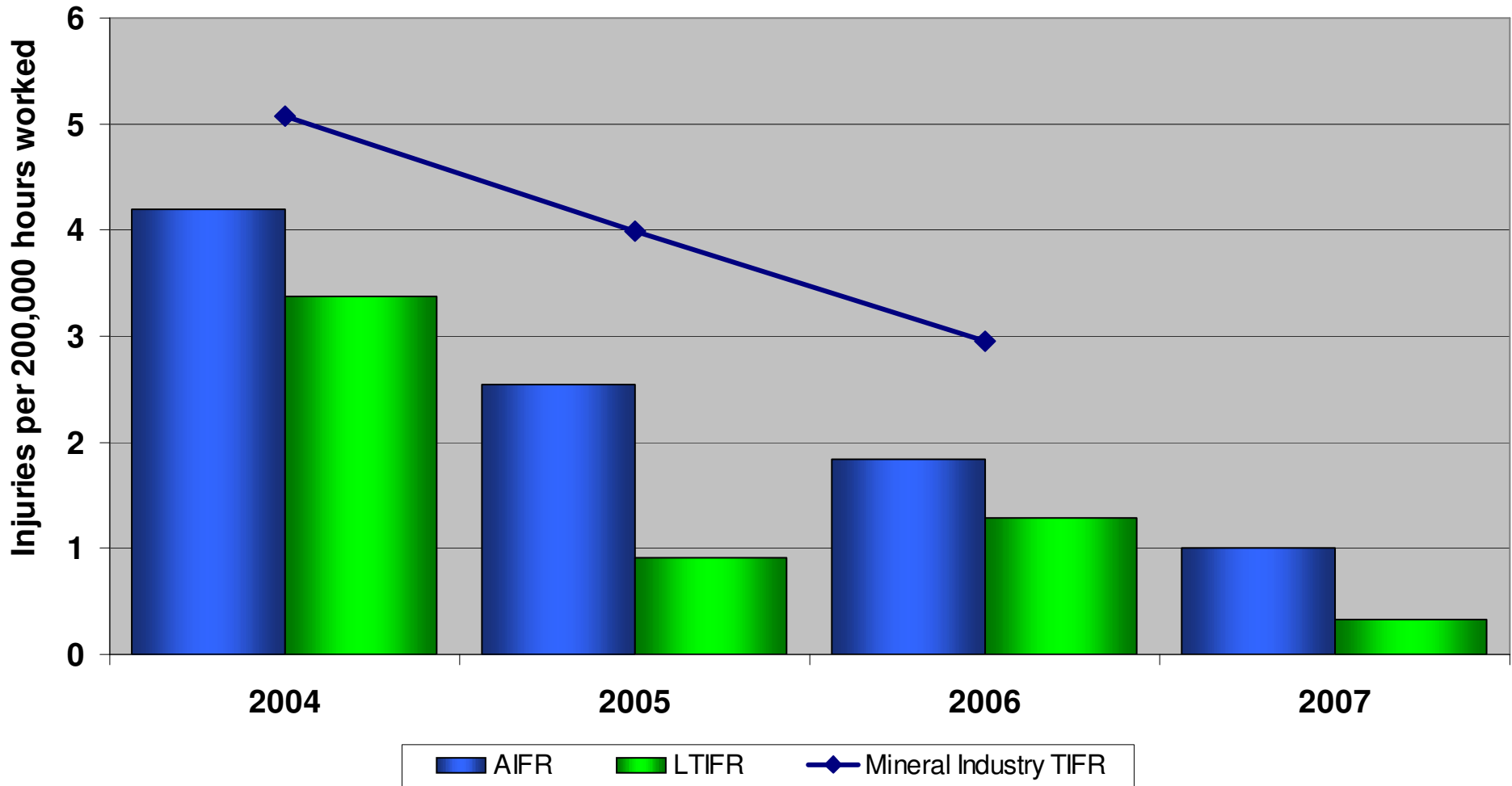
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- Who we are
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### All Injury and Lost Time Frequency Rates



Source: ERA, Minerals Council of Australia

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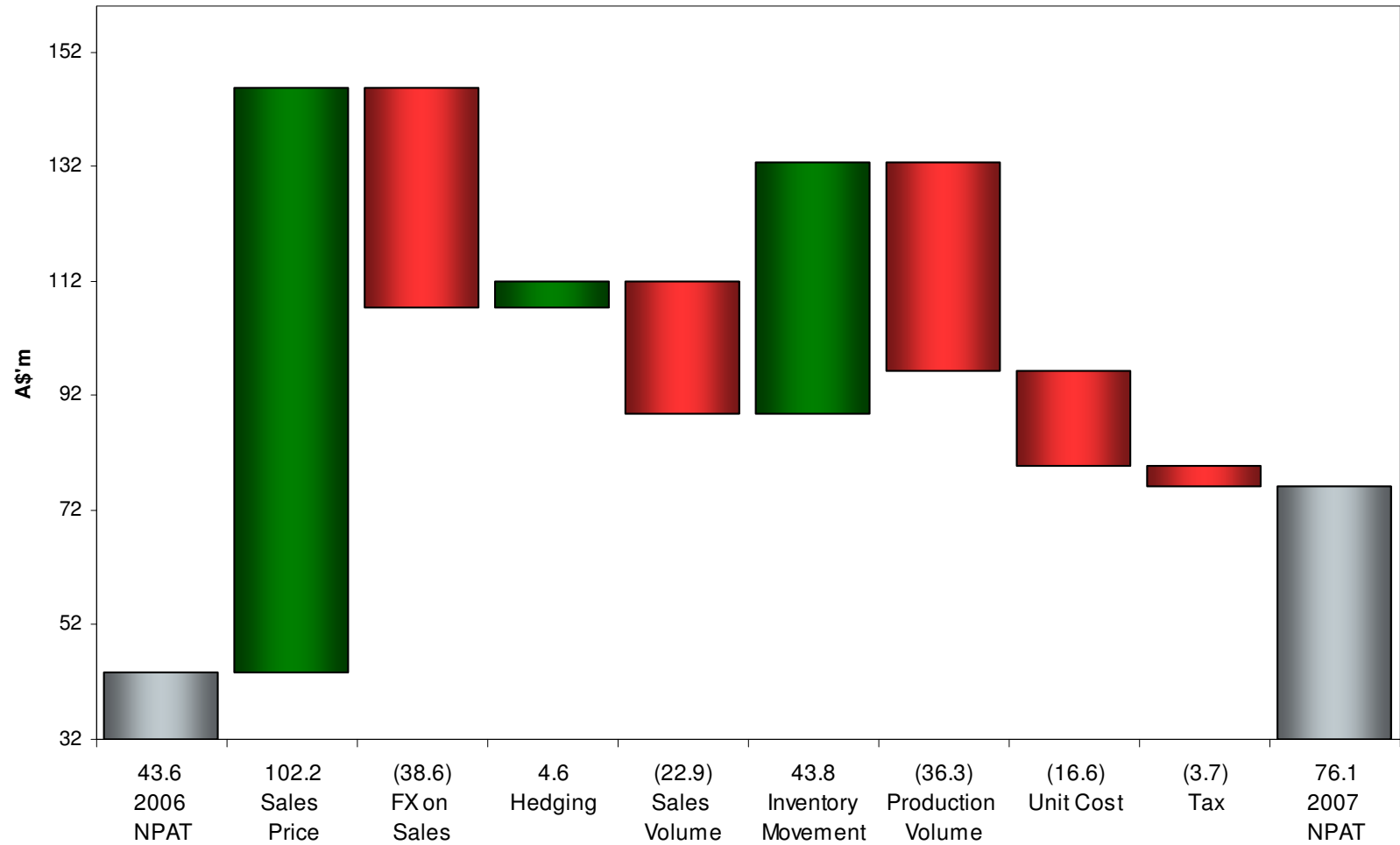
## Record Results in 2007

	2007	2006	Change
Net profit (A\$ Million)	76	44	+74%
Revenue (A\$ Million)	362	317	+14%
Average realised price (US\$/lb)	25.06	18.36	+36%
Production U <sub>3</sub> O <sub>8</sub> (tonnes)	5,412	4,748	+14%



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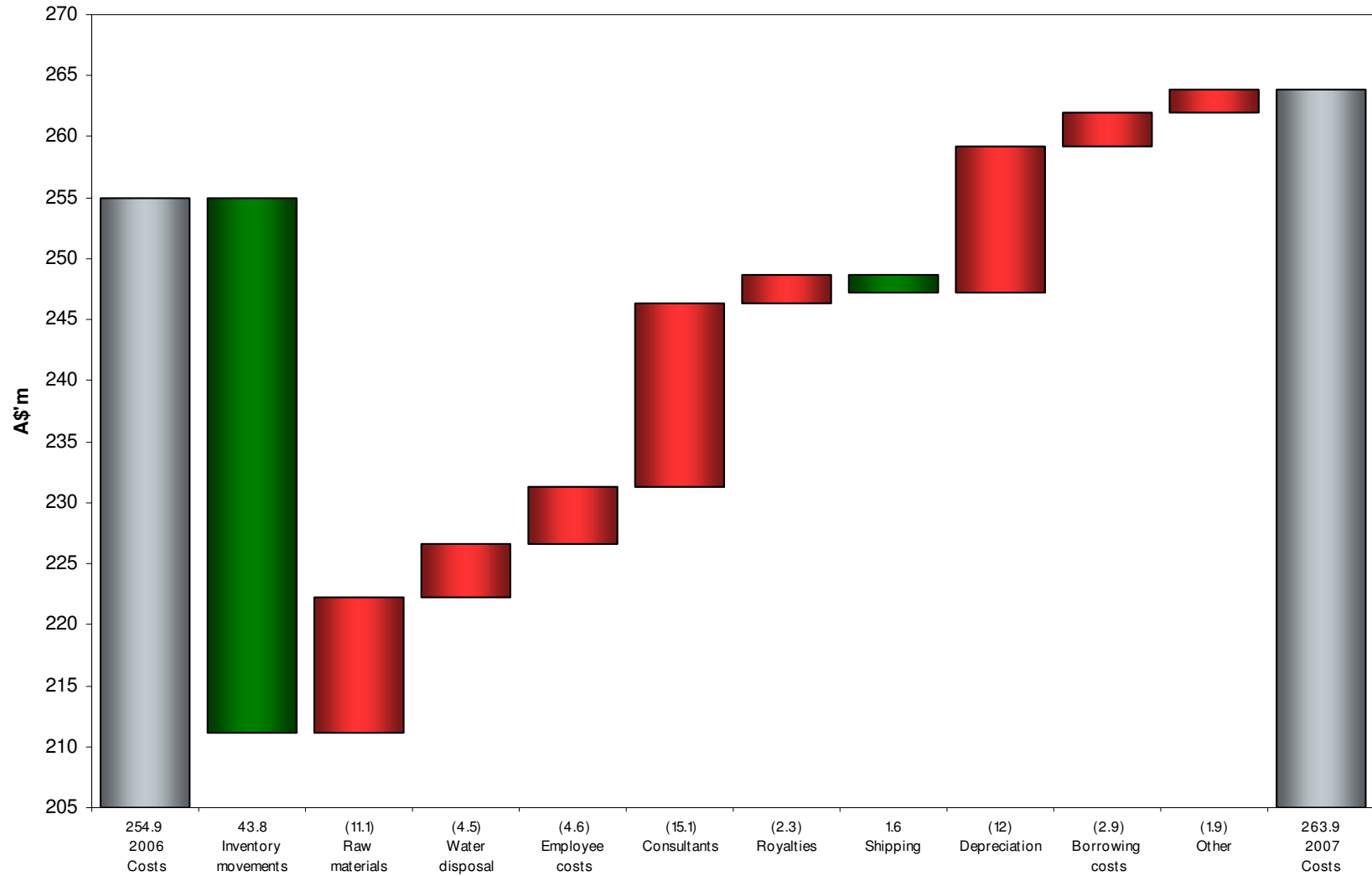
# Net profit (A\$)





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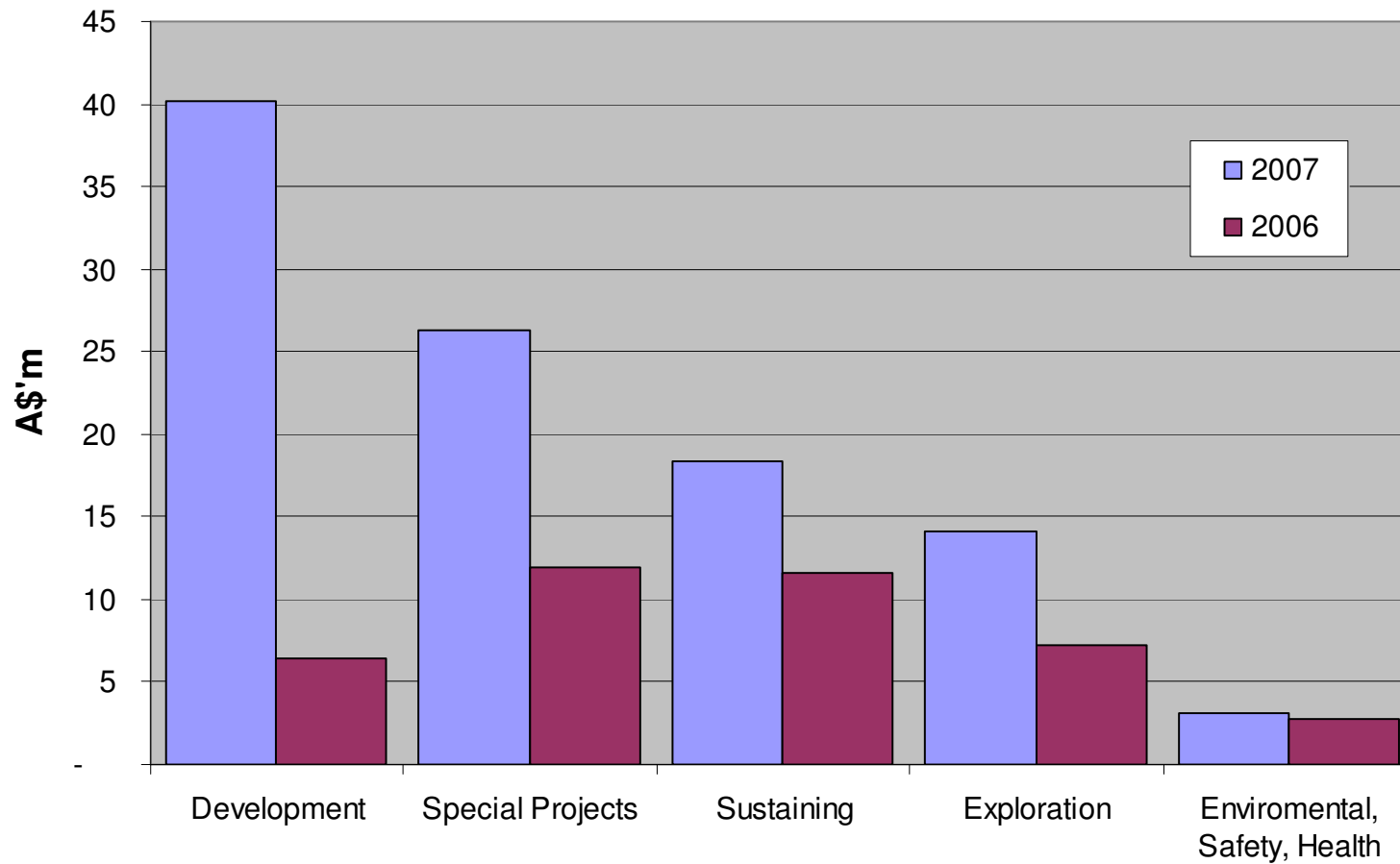
# Operating Costs





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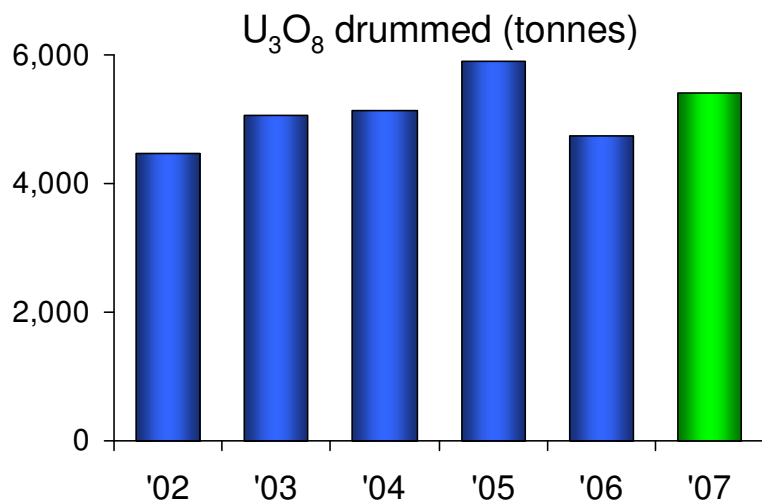
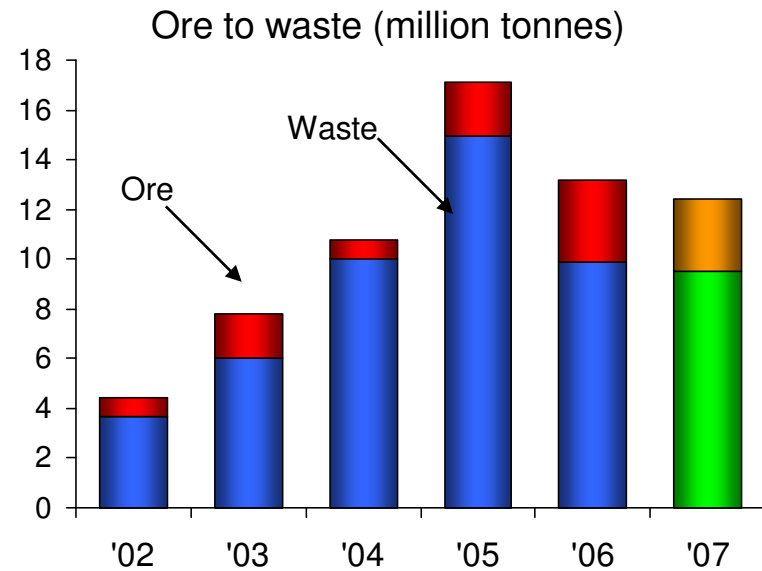
# Capital Expenditure





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## Operational Performance



- Process plant throughput capacity of 2.4 million tonnes per annum
- All sulphuric acid imported from 3Q 2007
- Mining due to cease in 2012, processing life out to 2020
- 2007 production, although affected by Force Majeure, second highest on record
- Expect production in 2008 to be at normal levels
- Significant expansion work underway

Source: ERA



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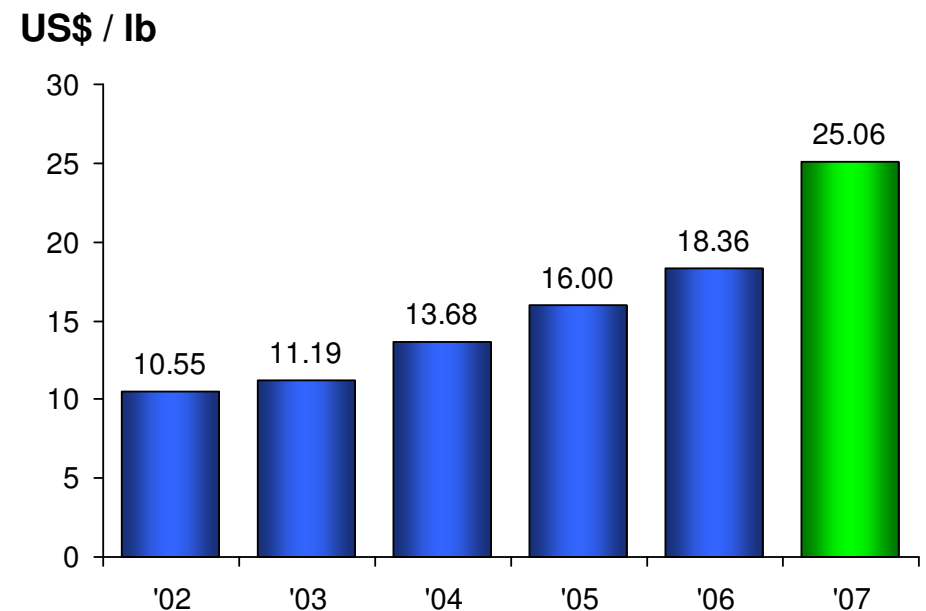


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## Sales Contracts

- ERA sells uranium under long term contracts
- Large portfolio of customers
- Contracts are generally:
  - 3 to 5 years in duration
  - first delivery 2 to 4 yrs after agreement
- Contracts contain a mixture of pricing mechanisms:
  - Fixed price/base escalated
  - Linked to market indicators
  - Negotiated prices
  - Combination

### Average realised uranium price



Source: ERA





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## ERA New Facilities

### Laterite Plant

- Treats stockpiled 'lateritic' ore
- Annual  $U_3O_8$  production  $\sim$  400 tonnes

### Radiometric sorting

- Radiometric sorting facilitates the upgrading & processing of lower grade ores
- Brings forward production of 1,100 tonnes over 4 years
- Application could be further expanded

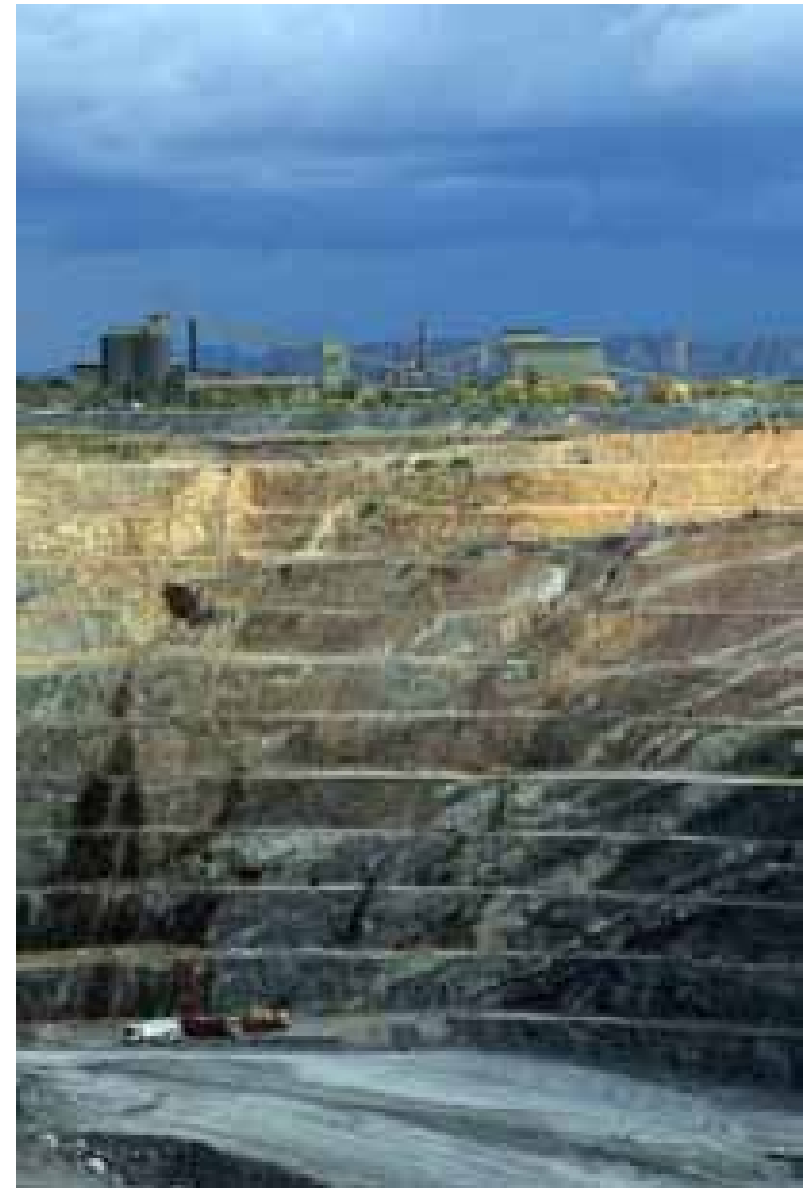




## ERA Pit 3 Extension

ERA has recently commenced an extension to the Ranger operating pit following a detailed feasibility study

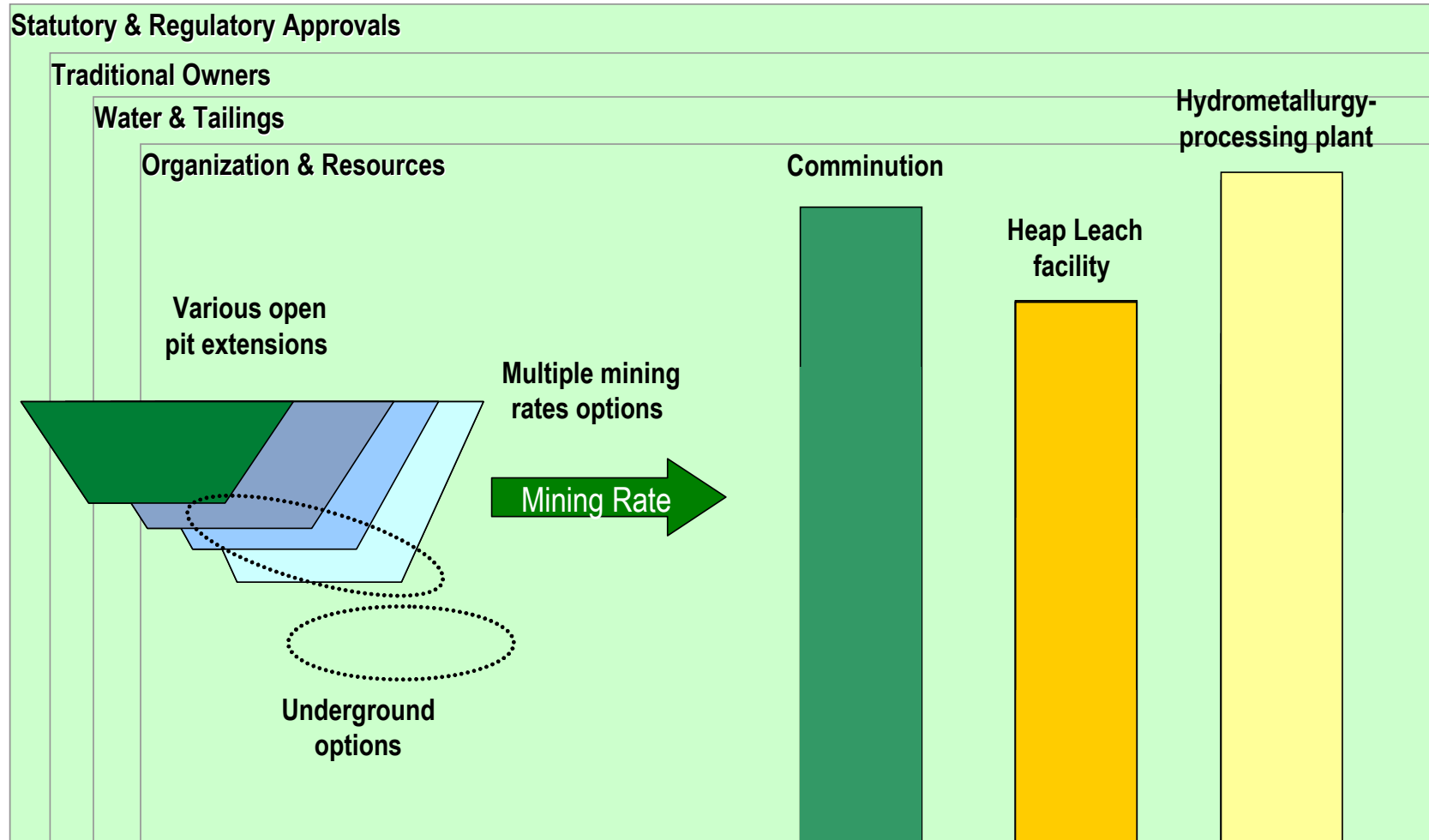
- extension contains 54.5 Mt of material and has extended mine life to 2012
- an additional 4,857 tonnes of uranium (10.7 Mlbs) added to reserves (majority of production in 2011)
- extension preserves current mining roles & creates 45 additional jobs





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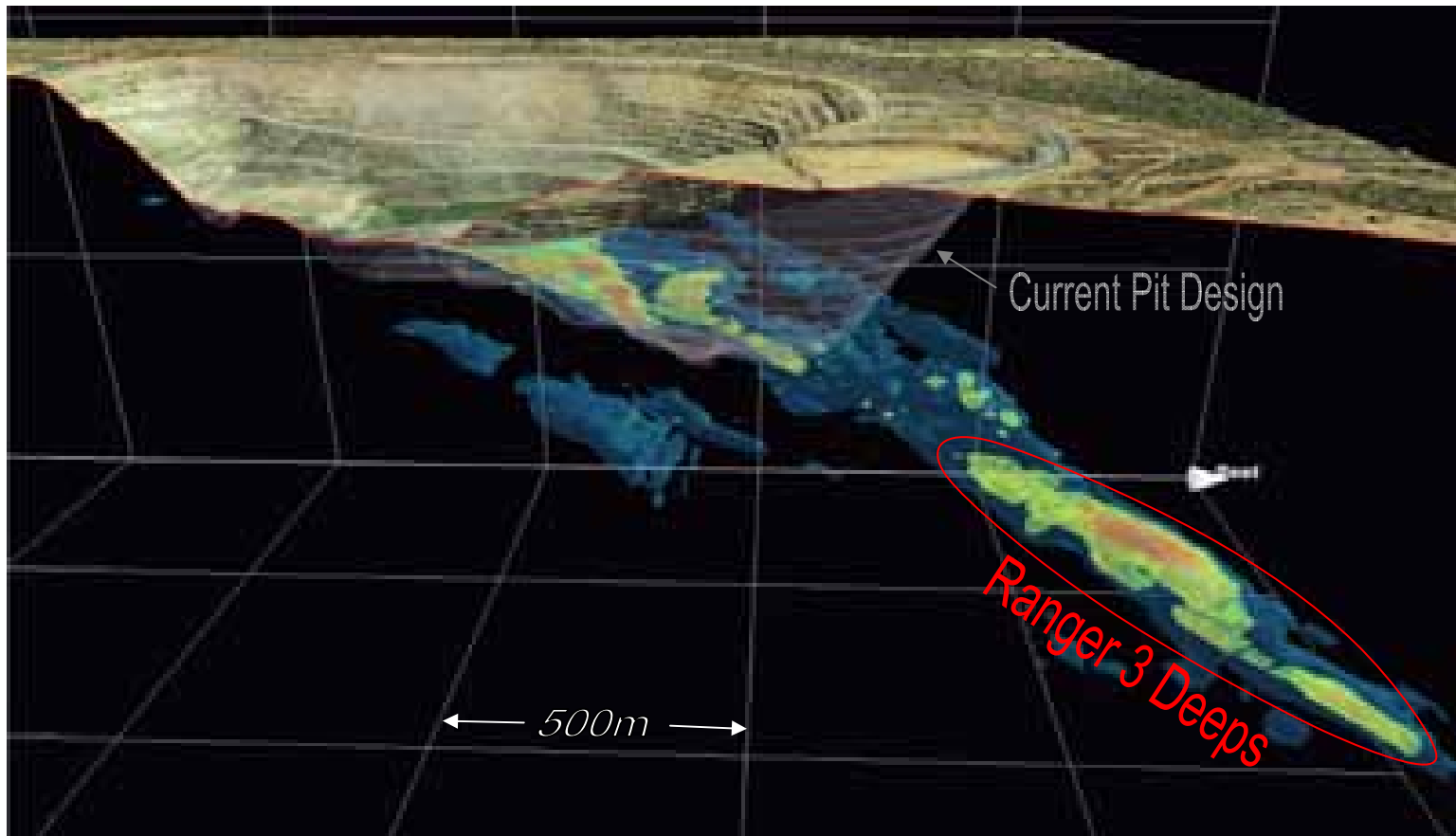
# Ranger Expansion Options





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## Extensions to Orebody 3



Source: ERA Jan 08 Pit, Shell 50, Ore @ 0.08% cutoff

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## Reserves and Resources

<b>Ranger 3</b>	<b>Ore - MT</b>	<b>% U<sub>3</sub>O<sub>8</sub></b>	<b>Contained U<sub>3</sub>O<sub>8</sub> - tonnes</b>
Reserves <sup>1</sup>	32.11	0.15	49,671
Resources <sup>2</sup>	42.39	0.12	50,567

<b>Jabiluka</b>	<b>Ore - MT</b>	<b>% U<sub>3</sub>O<sub>8</sub></b>	<b>Contained U<sub>3</sub>O<sub>8</sub> - tonnes</b>
Reserves <sup>3</sup>	11.80	0.50	59,000
Resources <sup>3</sup>	15.18	0.50	76,403

- In addition to resources, Ranger has approximately 15-20k tonnes of U<sub>3</sub>O<sub>8</sub> material that can not be economically extracted through the existing processing plant
- Approximately half of the metal is contained in existing stockpiles, the remainder is in situ in the current final pit shell design
- The future processing of the material is subject to a detailed study to be concluded mid year

Resources and Reserves as at 31.12.07

1 Cut-off Grade – Insitu ore 0.08% U<sub>3</sub>O<sub>8</sub>; Cut-off Grade 0.06% Stockpile ore

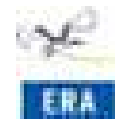
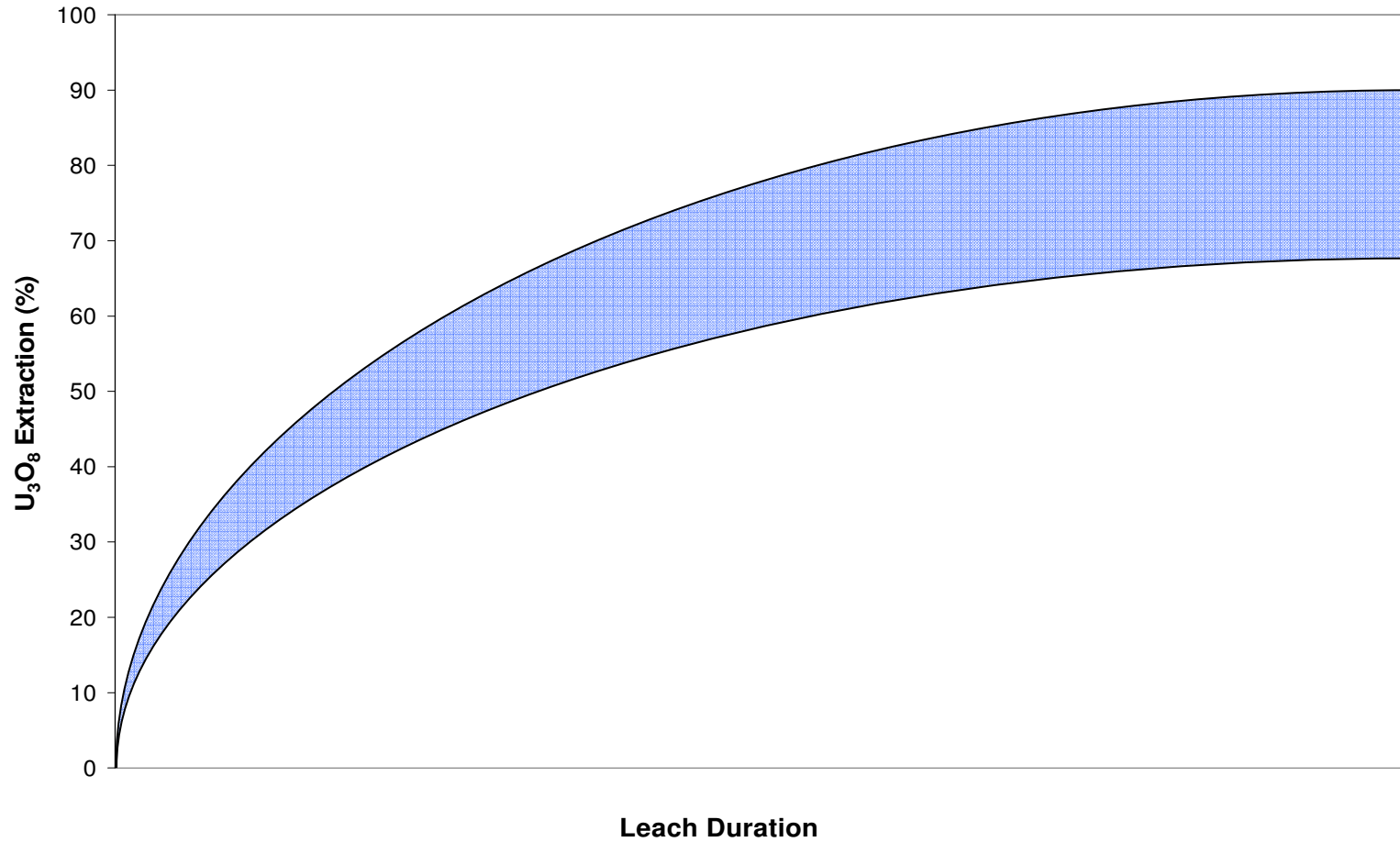
2 Includes low grade ore not yet processed by 2020

3 Cut-off Grade – 0.20% U<sub>3</sub>O<sub>8</sub>



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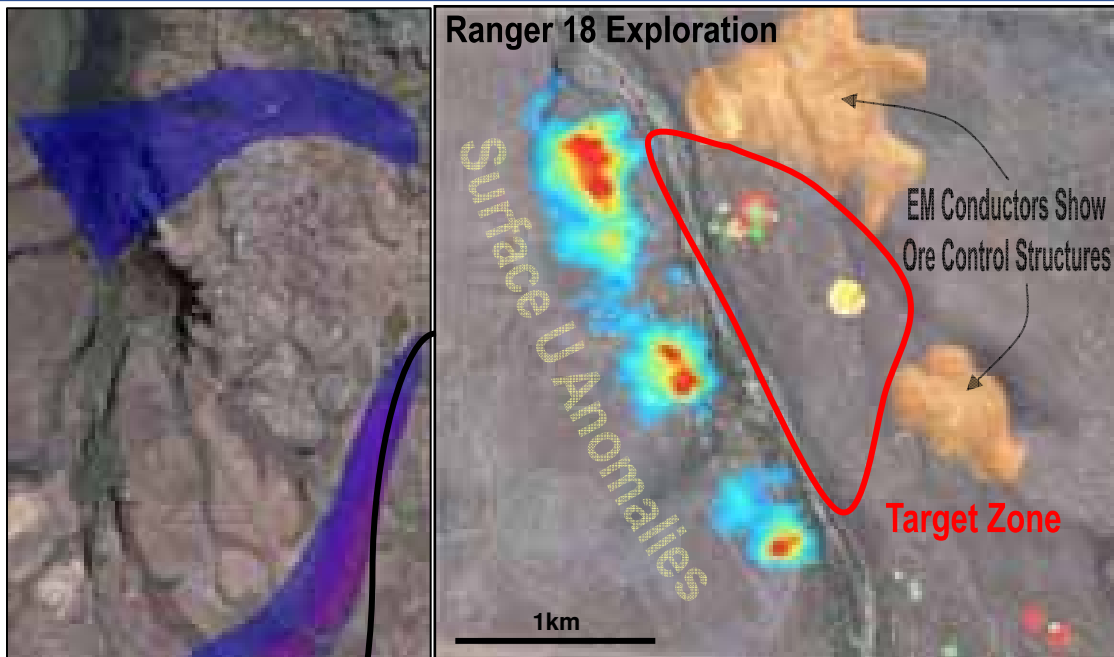
# Preliminary Heap Leach Results



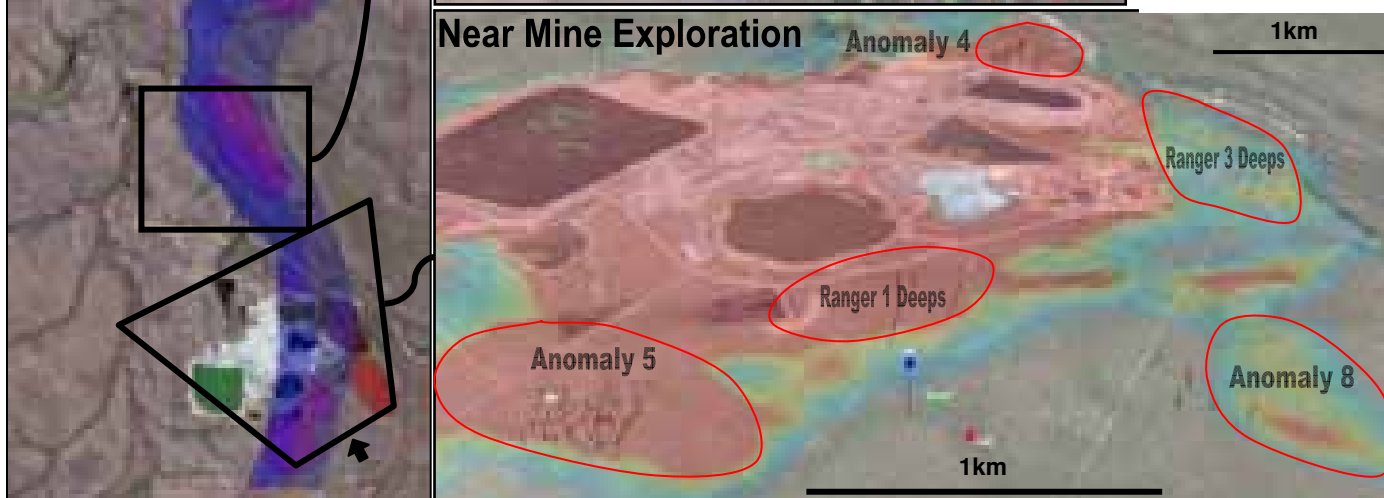


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## Significant Exploration Pipeline



- Ore shown to extend to >400m depth
- Numerous targets untested at depth
- Historical drill results encouraging
- Trial seismic survey program for drill targeting







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## **Sustainable Development**

ERA is committed to developing its resources responsibly & sustainably with an understanding of, and respect for, social, cultural & environmental consequences

- Health and Safety of our people
- Protection of the environment and other world heritage values in surrounding
- Kakadu National Park
- Indigenous engagement
- Ensuring that our shareholders, employees & stakeholders have a legacy of economic & social value



Image used with the consent of the Gundjeihmi Aboriginal Corporation



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## **Planning for closure & rehabilitation**

ERA has had a long history of environmental management & reconstruction work at Ranger mine

- final landform designs & trials
- revegetation
- ecosystem reconstruction

Closure plans & liabilities are updated annually

Regulator & stakeholder engagement in developing closure plans





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## Engaging with Traditional Owners

- Cultural Awareness training now facilitated by Traditional Owners
- Archaeological sites surveyed & a number of sites preserved
- Mirarr working with ERA to conduct traditional burning & improved fire management of leases
- Formalised access by Mirarr to non-operational areas of the leases
- Recognition of Mirarr as traditional owners of the town of Jabiru



Images used with the consent of the Gundjeihmi Aboriginal Corporation



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## **Summary**

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- 28 years of uranium mining experience in the Northern Territory of Australia
- World's second largest uranium mine
- Lease areas contain world class ore bodies, including one of world's largest undeveloped resource
- 2007 was a year of record results
- Significant expansion/exploration work already underway at Ranger
- Poised for further expansion

